

2. (Amended) A combinatorial library according to claim 1, wherein each of said plurality of complexes has the formula $Z(A^i)_n$, wherein Z is the metal atom or metal ion, each A^i is a non-biopolymer ligand independently selected from a group of non-biopolymer ligands comprising at least three different members, n is the number of non-biopolymer ligands reversibly bonded to the metal atom or metal ion and is an integer equal to two or greater, and i is an index number for each non-biopolymer ligand and is an integer from 1 to n.

3. (Amended) A combinatorial library according to claim 2, wherein each of said plurality of complexes has the formula $Z(A^1)(A^2)(A^i)_{n-2}$, wherein A^1 and A^2 are non-biopolymer ligands capable of reversibly binding to the metal atom or metal ion and are independently selected from a group of non-biopolymer ligands having at least three different members and i is an index number for each A and is an integer from 3 to n.

5. (Amended) A combinatorial library according to claim 2, wherein each of said plurality of complexes has the formula $Z(A^1)(A^i)_{n-1}$, wherein A^1 is a non-biopolymer ligand capable of reversibly binding to the metal atom or metal ion and is independently selected from a group of non-biopolymer ligands having at least three different members; i is an index number for each A and is an integer from 3 to n; and Z, A^1 , and each A^i are selected so that the reactions $Z(A^i)_{n-1} + A^1 \rightarrow Z(A^1)(A^i)_{n-1}$ and $Z(A^1)(A^i)_{n-1} \rightarrow Z(A^i)_{n-1} + A^1$ each have a rate constant of greater than about 2 per second.

6. (Amended) A combinatorial library according to claim 2, wherein at least one of A^i is a non-biopolymer ligand comprising a recognition element selected from the group consisting of a DNA intercalator, a major or minor groove DNA binder, hydroxy groups, pyrrolid-2-yl groups, N-alkylpyrrolid-2-yl groups, alkoxy groups, tetrahydrofuran-2-yl groups, pyrid-2-yl groups, and substituted or unsubstituted phenyl groups.

7. (Amended) A combinatorial library according to claim 2, wherein the metal atom or metal ion is a transition metal atom or transition metal ion.
